

Work Order ID 96038

96038

Page 1

January 18, 2013 8:32:23 AM

Item ID: D3996-FE-832-EF

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Self-Clinching Fastener

Start Date: 1/18/13 Start Qty: 500.00

500

Cust Item ID:

Required Date: 1/23/13 Req'd Qty: 500.00

500

Customer:

Reference:

Approvals: Process Plan: *CZ*

Date: 13/01/18

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

| Work Center ID | Operation Description | Set Run Hours | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Sp. Stamp |
|----------------|-----------------------|---------------|--------|-----------|------------|------------|---------------|-----------|
|----------------|-----------------------|---------------|--------|-----------|------------|------------|---------------|-----------|

Draw Nbr

Revision Nbr

D3996

A

100

0.00

100

Purchasing

Purchasing

Memo

Issue P/O: *18806*

Purchase Part Number: FE-832-EF

Supplier: Interfast Inc.

Certificate of conformity is required

0.00

CZ 13/01/18 *(500)*

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.00

13/01/18 *(500)*

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions |
| | | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |

Work Order ID 96038

96038

Page 2

January 18, 2013 8:32:23 AM

Item ID: D3996-FE-832-EF

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Self-Clinching Fastener

Start Date: 1/18/13 Start Qty: 500.00

500

Cust Item ID:

Required Date: 1/23/13 Req'd Qty: 500.00

500

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

120 QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

130 Identify as per dwg & Stock Location: GA

0.00

130

Packaging

Memo

0.00

Packaging

140 QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

See

See

13-01-23

13/1/25

13-01-24

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION <div style="display: flex; justify-content: space-around;"> <div> <input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update </div> <div> <input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab </div> <div> <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite </div> <div> <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier </div> <div> <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other </div> </div> | |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Picklist Print

January 18, 2013 8:32:22 AM

Pag : 1

Work Order ID: 96038

Parent Item: D3996-FE-832-EF

Start Date: 1/18/13

Required Date: 1/23/13

Parent Item Name: Self-Clinching Fastener

Start Qty: 500.00

Required Qty: 500.00

Comments: IPP RevA: new issue 09.11.11 DD verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| FE-832-EF PEM Insert | | Purchased | No | | | 110 | Each | 0.0000 | 1 | 500 | | | |

1/18/13 (500)

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

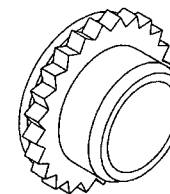
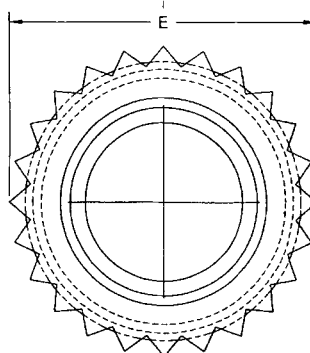
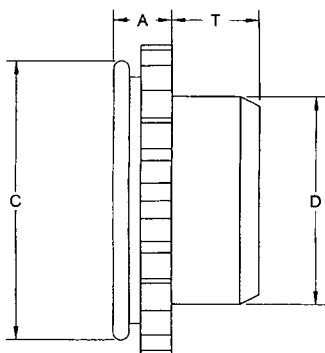
| | | | | | | | | | | | | | | | | | | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | Other |
|-------------------------------------------------------|-----------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Grain |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Hardware |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete |
| <input type="checkbox"/> Crushed/Crimped | <input type="checkbox"/> Burrs | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Maintenance |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Countersink | <input type="checkbox"/> Misabeled |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Misread |
| <input type="checkbox"/> Ripples in Bend | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Offset |
| <input type="checkbox"/> Torque Waves in Extrusion | <input type="checkbox"/> Drawing | <input type="checkbox"/> Out of Calibration |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Sequence |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Folio | <input type="checkbox"/> Outside Dimensions |
| | | <input type="checkbox"/> Ovalized |
| | | <input type="checkbox"/> Over/Under tolerance |
| | | <input type="checkbox"/> Part Incorrect |
| | | <input type="checkbox"/> Part Lost/Missing |
| | | <input type="checkbox"/> Part Moved |
| | | <input type="checkbox"/> Positioned Wrong |
| | | <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced |
| | | <input type="checkbox"/> Temperature/Cure |
| | | <input type="checkbox"/> Weld |
| | | <input type="checkbox"/> Wrong Stock Pulled |
| | | <input type="checkbox"/> Other |

SPECIFICATION CONTROL DRAWING



C213/01/18
W10.96038

D3996-XXX-YYY-ZZZ SELF-CLINCHING FASTENER

| THREAD SIZE | THREAD CODE ("YYY") | TYPE ("XXX") | A MAX (SHANK) | SHEET THICKNESS | C +0.000 -0.005 | D MAX | E -0.005 +0.005 | T +0.015 -0.300 | HOLE SIZE IN SHEET +0.003/-0.000 | MIN DIST. HOLE C1 TO EDGE | WEIGHT lb |
|----------------|---------------------|--------------|---------------|-----------------|-----------------|-------|-----------------|-----------------|----------------------------------|---------------------------|-----------|
| #4-40 (0.112) | 440 | FEO | 0.040 | 0.039-0.045 | 0.171 | 0.145 | 0.192 | 0.065 | 0.172 | 0.14 | 0.00031 |
| | | FE | 0.060 | 0.059-0.070 | | | | | | | 0.00037 |
| #6-32 (0.138) | 632 | FEO | 0.040 | 0.039-0.045 | 0.212 | 0.180 | 0.244 | 0.075 | 0.213 | 0.17 | 0.00047 |
| | | FE | 0.060 | 0.059-0.070 | | | | | | | 0.00068 |
| #8-32 (0.164) | 832 | FEO | 0.040 | 0.039-0.045 | 0.289 | 0.215 | 0.322 | 0.090 | 0.290 | 0.20 | 0.00098 |
| | | FE | 0.060 | 0.059-0.070 | | | | | | | 0.00124 |
| #10-32 (0.190) | 032 | FEO | 0.040 | 0.039-0.045 | 0.289 | 0.245 | 0.322 | 0.110 | 0.290 | 0.20 | 0.00104 |
| | | FE | 0.060 | 0.059-0.070 | | | | | | | 0.00120 |
| 1/4-28 | 0428 | FE | 0.060 | 0.059-0.070 | 0.343 | 0.318 | 0.384 | 0.120 | 0.344 | 0.28 | 0.00158 |

NOTES

1) SPECIFICATION: PENNENGINEERING (PEM) MINIATURE SELF-CLINCHING FASTENER, SELF-LOCKING
PEM P/N XXX-YYY-ZZZ

WHERE "XXX" = TYPE "FEO" (SHORT SHANK) OR "FE" (LONG SHANK) PER TABLE

"YYY" = THREAD CODE PER TABLE

"ZZZ" = FINISH CODE PER NOTE 2 BELOW

FOR EXAMPLE, #8-32 THREAD, LONG SHANK, ELECTRO-FILM FINISH:

DART P/N = D3996-FE-832-EF

PEM P/N = FE-832-EF

2) FINISH: FINISH CODE ("ZZZ") PER THE FOLLOWING:

"C" = CADMIUM YELLOW CHROMATE PER ASTM B766 CLASS 5 TYPE II

"CI" = CADMIUM CLEAR CHROMATE PER ASTM B766 CLASS 5, TYPE III

"EF" = ELECTRO-FILM PER MIL-PRF-46010

"MD" = MOLYBDENUM DISULFIDE DRY FILM (STD PEM FINISH)

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: N/A

7) WEIGHT: N/A

RELEASED
2009-11-08

| | | | |
|------------|-------------|----|----------|
| A | NEW ISSUE | CP | 09.10.01 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | | | |
| DRAWN | | | |
| CHECKED | | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 09.10.01 | | |

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWING NO. D3996 | REV. A |
| TITLE SELF-CLINCHING FASTENER | SHEET 1 OF 1 |
| SCALE NTS | |
| COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD | |



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO18866**

Purchase Order Date 1/18/13

PO Print Date 1/18/13

Page Number 1 of 1

Order From :

VC-INT001

INTERFAST INC.
6360 COTE DE LIESSE
MONTREAL, QC H4T 1E3
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

5147385959

5147386363

110900

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



| Line Nbr | Reference Revision ID Vendor Part Number | Description/ Mfg ID | Req Date/ Taxable | Req Qty/ Unit of Measure | Ship Method | Unit Price | Extended Price |
|----------|------------------------------------------------|------------------------|----------------------|-----------------------------|------------------|------------|-------------------|
| 1 | FE-832-BF | PEM Insert | 1/23/13 Yes | 500.00 Each | FedEx Pl collect | \$0.2200 | \$110.00 |

Special Inst:

AS PER DWG D3996 REV. A
B96038 *Sh*

PO Total:

\$110.00

CERTIFICATE OF CONFORMITY

REQ'D UPON DELIVERY

Change Nbr:

Change Date: 1/18/13

CL
No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required **YES** NO

INTERFAST

22 WORCESTER ROAD, TORONTO, ON, CAN, M9W 5X2
 TEL: 1-416-674-0770 FAX: 416-674-5804
 WEBSITE: www.interfast.ca

Packing Slip

Invoice#:

761285

18-JAN-13

SV DART AEROSPACE LIMITED
 OE 1270 ABERDEEN ST.
 LN HAWKESBURY ON
 DD K6A 1K7
 U CAN
 T
 OA

SE DART AEROSPACE LIMITED
 HX 1270 ABERDEEN ST.
 IP HAWKESBURY ON
 PE CAN K6A 1K7
 D
 T
 I
 O
 R
 A

SHIP MODE: Purolator
 MODE D'EXPEDITION:
 FOB: FOB - Interfast Dock
 F.A.B.:
 NO. CARTONS: 1
 WAYBILL #: NAE100010580
 FACTURE DE VOIE #:

CUSTOMER PO#:
 N° DU BON DE COMMANDE:



PO18866

CUSTOMER#:
 CLIENT#:

110900

OUR SALE#:
 N° DE LA VENTE:

633907

TERMS: Net 30 Days (01)
 MODALITES:

| QUANTITY ORDERED QUANTITÉ COMMANDEE | U/M M.N.R | QUANTITY SHIPPED QUANTITÉ EXPÉDIÉE | BALANCE DUE SOLDE | PART# & DESCRIPTION PARTIE # ET DESCRIPTION | LOT# / Serial# |
|----------------------------------------|--------------|---------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------|
| 500.00 | EA | 500.00 | 0.00 | Cust PO Line#: Cust Part#: FE-832-MD | |
| Harmonized code: | | 7318.16.00.90 | | Part#: FE-832-MD Description: NUT Packbox#: PACK631719 Lot Line#: 1 Qty: 500 Expire Date Country Of Origin: USA | D927743 |
| | | | | Rev Lvl: Mfg/Cure Date: | |

Total Qty Shipped: 500

GST/TPS # R102504958 QPST/TVQ #1009982431TQ0001

PAST DUE ACCOUNTS WILL BE SUBJECT TO A SERVICE CHARGE OF 1.5% PER MONTH. INTERFAST WILL BE RESPONSIBLE FOR THE AUTHORIZED REPLACEMENT OF GOODS WHICH ARE DEFECTIVE OR WHICH ARE NOT TO SPECIFICATION PROVIDED THAT CLAIMS ARE MADE WITHIN 14 DAYS OF SHIPMENT.

LES COMPTES EN SOUFFRANCE SERONT ASSUJETTIS À DES FRAIS DE SERVICE DE 1.5% PAR MOIS. INTERFAST NE SERA RESPONSABLE QUE POUR L'ÉCHANGE AUTORISÉ DE BIENS DÉFECTUEUX OU QUI NE SONT PAS CONFORMES AUX SPÉCIFICATIONS À CONDITION QUE LES RÉCLAMATIONS SOIENT EFFECTUÉES DANS LES QUATORZE (14) JOURS SUIVANT L'EXPÉDITION.

"I hereby certify that the items, or materials covered by this document have been inspected and tested and conform to all applicable specifications relative thereto, and unless authorized by customers, no work or alterations have been performed. Supportive documentary evidence of conformance is either on file or available upon request."

"Je certifie par les présentes que les articles ou matériaux couverts par le présent document ont été inspectés et testés, et qu'ils sont conformes à toutes les spécifications applicables en ce qui a trait auxdits articles ou matériaux. À moins d'avoir obtenu l'autorisation du client, aucun remaniement ni aucune modification n'ont été apportés. La documentation de soutien prouvant la conformité se trouve dans le dossier ou est disponible sur demande."

Sunita Kharbanda



Quality System
 Administrator

I hereby certify that the Aircraft Parts, Appliances and or materials described hereon were acquired from a source of supply that is consistent with the conditions under which the department of Transport Distributor approval No.178-04 has been granted certifier by: